

**EFFECT OF AUDIO DRAMA TO PROMOTE
PERSONAL HYGIENE AMONG VISUALLY
CHALLENGED ADOLESCENT GIRLS AT SELECTED
BLIND SCHOOLS, COIMBATORE**

REG. NO. 30101433

A Dissertation Submitted to
The Tamilnadu Dr. M.G.R. Medical University,
Chennai-32.

In Partial Fulfillment of the Requirement for the

Award of the Degree of

MASTER OF SCIENCE IN NURSING

2012

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Abstract

A study was conducted to find out the effect of audio drama to promote personal hygiene among visually challenged adolescent girls in selected Blind schools, Coimbatore. The research design adopted for this study was Quasi-experimental one group pre-test post test design. Purposive sample of 21 samples were selected for this study. Initially, the knowledge and practice of personal hygiene of the visually challenged adolescent girls was assessed using an interview schedule and checklist respectively. Audio drama on techniques and importance of hygienic practices was played 20 minutes daily once for a period of 26 days. Post test was done using the same tool. Appropriate statistical techniques were used to test the hypotheses. The finding reveals that there was a significant improvement in knowledge and practice of personal hygiene. Thus, audio drama promotes knowledge and practice of personal hygiene among visually challenged adolescent girls.

**Effect of Audio Drama to Promote Personal Hygiene
Among Visually Challenged Adolescent Girls in
Selected Blind Schools, Coimbatore**

Adolescence is the life stage that bridges childhood and adult hood. Adolescents are positive resources of the country and they are unlimited energizers, with power and strong urge to create things. Adolescents are characterized as developing dynamites, enthusiastic, explorative, which gets easily depressed, anemic and aggressive. Hence this period is a crucial period especially girls faces some typical psycho-emotional problems like depression and loneliness. It is a proven fact in the world of despair, negligence and isolation to lead a normal day to day life is a big hindrance for the disabled person. Especially, a visually impaired adolescent girl needs enormous effect to sustain herself in this world.

Adolescents accounted for 22.8 % of the total population of India (Planning Commission, 2001). According to 2011, the adolescents are around 550 million and there are around 239 million adolescents in India are in the age group of 10-19 years (Government of India, Census 2011).

World Health Organization (WHO) in its 10th revision, in January 2009, estimates that 45 million blind people and 135 million visually impaired people are located around the world. Over 90 % of these visually impaired people live in developing countries like India, Sudan, Uganda, China and Africa.

Out of the visually impaired people, over 120 million people have significant low vision conditions that cannot be corrected, cured or treated by conventional refraction, medicine or surgery. This number is expected to double by 2020. There are over 1.4 million visually impaired children ages 0-14 years and an estimated 1.5 million children below the age of 15 years are blind (WHO, 2004). Most blind people finished their education up to the age of 16 years (Evan & Pearson, 1990).

About 9 million visually impaired people in India, 80 % of them live in remote and isolated villages. This incidence rate of 55 cases was found highest in the rural areas of Andhra Pradesh, whereas Tamil nadu reported highest incidence rate of 50 cases in the urban areas and prevalence rate now in Tamil nadu is 4 per 1000 population and which reported highest rate of 47 cases of incidence which is highest in the country (Shukla, 2001).

Visual impairment is vision loss to such a degree so as to qualify as an additional support and need through a significant limitation of visual capability. Globally, uncorrected refractive errors are the main cause of visual impairment but in middle and low income countries cataracts remain the leading cause of blindness. The number of people visually impaired from the infectious disease has greatly reduced in the last 20 years. 80 % of all visual impairment can be avoided or cured. Major causes of blindness includes corneal blindness due to scarring and opacity – 26 %, congenital anomalies – 25 %, retinal diseases-21 %, cataract (Acquired & Congenital) - 12 % main causes are Trachoma (3.6 %), Glaucoma (12.3 %), Onchocerciasis (0.8 %), Childhood blindness (3.9 %) and other causes (Malnutrition vitamin-A deficiency, ocular injury, conjunctivitis, Measles) – 3 % (Park, 2011).

Females in every region of the world and of all ages have a significant high risk for being visually impaired than males because of their longer life expectancy, poorer societies and lack of access to services (WHO, 2000).

The visually challenged are not able to meet even their activities of daily living which is very essential to lead their normal life and also difficulties in face to face co-ordination, some emotional stress, difficulty in learning. Furthermore for children who are blind, activities of daily living demand increased energy and the need to be fit might be even greater (Buell, 1982). Well people are capable of meeting their own hygiene needs and physically (visually impaired) challenged may require various levels of assistance. These include taking bathing, proper oral hygiene, shaping the nails correctly, good hair wash, cleaning the clothes and maintain neat and healthy life. Thus hygiene promotion is a planned approach to preventing diseases through the widespread adoptions of safe hygiene practices (United Nation International Children Emergency Fund, 1999).

The term audio film which refers a normal format of sonic art that explores the possibilities of telling a story solely through sound without need for visual elements or a narrator. It is effective 80 % than other mode of teaching, hence audio drama which is a recorded format, is auditory in the physical dimension but equally powerful as visual in the psychological dimension (wikipedia dictionary). Douglas Walker, 2009, says that visually impaired students are very motivated to listen and can able to rewind and pause to make them hear effectively.

The major challenges facing among the visually impaired students in the scientific world is over whelming of many materials like text book, class schedules etc., along with increased use of videotapes, computers which adds more stress. Hence to improve their skills in communication and learning they have to understand Braille, and speed listening are introduced (Keller, et al., 1999). There were so many creative, innovative teaching tools to shape the future of visually challenged such as Abacus, learning through sculptures but one among the most effective method is hearing.

Health education is a widely used term in preventive medicine directed to promote healthy lifestyles. Education as a one-way approach to sort information dissemination. Like other aspects hygiene education relied on the techniques of formal education under which most professionals have been trained especially for visual impairment which help them to lead their life healthy.

1.1. NEED FOR THE STUDY

Blindness and low vision considered as an important health problem, they will have profound effects on quality of life for many people. They affect normal development and education of children, they inhibit mobility and economic well-being of the individuals. A huge amount of emotional and social stress the individual might experience as result of being blind.

It is estimated that at least 200 000 children in India have severe visual impairment or blindness and approximately 15 000 are in schools for the blind (Rahi, Sripathi & Gilbert Foster, 2009). According to Braille institute 12.1 million children

age from 16-17 years have visual impairment (Science Daily, 2010). In 1930's total blindness in India was 14/1000 population where glaucoma alone responsible for 20 % of blindness (Ophthalmic Research in Indian Council of Medical research). Global causes of blindness, constitutes about Diabetic retinopathy 5 %, childhood blindness 4 %, corneal staphyloma, scar phthisis bulbi 26.4 %, microphthalmos, anapthalmos and colobama 20.7 % retinal dystrophies and albinism 19.3 % and others 13 % (Rahi, Sripathi & Gilbert Foster, 2009).

The children who are visually impaired and blind consistently exhibited lower levels of fitness than sighted peers (Lieberman & McHugh, 2001). People with disability, presented with a consistently poorer state of hygiene, mainly affects their dental health, bad odor that leads to neglect from others and infection of the reproductive organs (Azrina, Nurzuliza & Saub, 2007). The research has shown that children with disabilities including visual impairments are often neither fully socialized and not expected to pursue a full range of life options (Stein, 1996).

An assessment study was conducted in Kenya to found the best methods of assessing hygienic practices. The researcher concludes that hygiene was best assessed rapidly and effectively using the cleanliness of the body, hand washing before food and after defecation with soap, bathing, disposal of wastes and feces and use drinking water are the main indicator (Almedom, 1996).

A KABP (Knowledge Attitudes behavior and practices) Study undertaken in 1999 showed there was a definite increase in health and hygiene awareness and safe practices in areas with health clubs then the areas which are not having health clubs (Mathew & Mukuwe, 1999). An awareness study conducted among the Hong Kong

visually impaired adolescent on their dental health concludes that knowledge and attitude towards dental health were poor amongst the Hong Kong visually impaired adolescents (Lind, et al, 1987).

A study was conducted among Canadian Dentists shows that 42 % of Canadian private dentists refused to treat disabled patients while 10 % were uncomfortable in treating these patients (Smith, 1989). Children with normal skin who are active can bath daily and in the summer, especially adolescent girls once puberty starts, baths emphasized daily (Smitherman, 2006). Hand washing with soap is said to be the most effective and cheapest way to prevent diarrhea to 40 % and acute respiratory infections to 20 % (Mayoclinic Staff, 2007).

A descriptive, cross-sectional study was conducted among 160 adolescent girls of a secondary school, in West Bengal, with the help of a pre-designed and pretested questionnaire revealed that 67.5 % aware about menstrual hygiene prior to menarche, 97.5 % girls use both soap and water and 48.75 % knew the use of sanitary pad during menstruation (Dasgupta & Sharkar, 2008).

A study conducted among visually impaired students of 16-25 age groups at K. J. Somaiya College of education, to spark in the young minds of many visually impaired college going girls by training them in etiquette, communication skills, self-managing skills and life skills, thus inculcating them in a winning attitude. This is a Project called Project Priyadharsini, where they train them through Lecture, demonstration, role-play and discussions, and teach them, motivate them to succeed in their life without anybody's support (Vasundara, 2006).

The teaching modalities for disabled, especially for visually challenged are getting focused more. The various other methods of teaching includes lecturing, discussion, demonstration, touching the sculptures and studying, abacus and Braille, the auditory form of teaching places the highest efficiency of teaching modality. Spoken audio has been available in schools and public libraries and to a lesser extent in music shop since 1930s. Many spoken word albums were made prior to the age of video cassettes, Digital Versatile Disc (DVD's) and compact discs, often plays rather than books. It was not until the 1980s that the medium began to attract book retailers, after that rather displaying book they displaying audio books mainly (McClatchy Newspapers, 2011).

A research on the design of an audio film for the visually impaired has concluded that it is possible to present a clear storyline or information solely through sound by employing sound effects, sound processing and surround sound to convey information eliminating the need of a narrator (Lopez & Pauletto, 2009).

A study conducted by Moray House School of Education, in Scotland regarding sex education and other hygienic practices like bathing, oral hygiene, hand washing, menstrual hygiene among children and young people with multiple disabilities especially visual impairment. They used models, videos and audio tapes to teach them and results suggested that to improve knowledge and to make them practice on hygienic practices and regarding sex education, audio method was best and we have to work with British Broadcasting Corporation (BBC) to develop audio cassettes and dramas (Issy Colo-Hamilton, 2007)

The community health nurse is responsible for identifying and helping the visually challenged to overcome the difficulties in promoting health. In primary prevention, health education is used to improve the visually challenged to practice proper hygiene measures which aids to improve their health. Health education the first main step in prevention aspect to reach the goal promotion of health. Hence, the researcher tends to promote personal hygiene among visually challenged adolescent girls, using an audio drama.

1.2. STATEMENT OF THE PROBLEM

EFFECT OF AUDIO DRAMA TO PROMOTE PERSONAL HYGIENE
AMONG VISUALLY CHALLENGED ADOLESCENT GIRLS AT SELECTED
BLIND SCHOOLS, COIMBATORE

1.3. OBJECTIVES

- 1.3.1. To determine the level of knowledge of visually challenged adolescent girls on personal hygiene.
- 1.3.2. To assess the practice of visually challenged adolescent girls towards personal hygiene.
- 1.3.3. Implement the Audio-drama to promote personal hygiene among visually challenged adolescent girls.
- 1.3.4. To assess the knowledge and practices of personal hygiene after audio drama among visually challenged adolescent girls.

1.4. OPERATIONAL DEFINITION

1.4.1. Effect

Effect refers to improvement in the knowledge and practice of personal hygiene after audio drama.

1.4.2. Personal Hygiene

Personal hygiene involves properly taking care of one-self, by brushing, bathing, washing hair, cutting the nails, menstrual hygiene, sleeping habits, keeping clothes clean, wearing chappals and allowing oneself to look and feel best.

1.4.3. Audio Drama

Audio drama refers to recorded format of solely sound, which is a conversation between two adolescent girls on importance and techniques of hygienic practices for duration of 20 minutes.

1.4.4. Visually Challenged Adolescent Girls

Girls in the age group of 13-19 years who has reduced vision and residing at Sri Avinashilingam Girls Higher Secondary School and Home Science College for women.

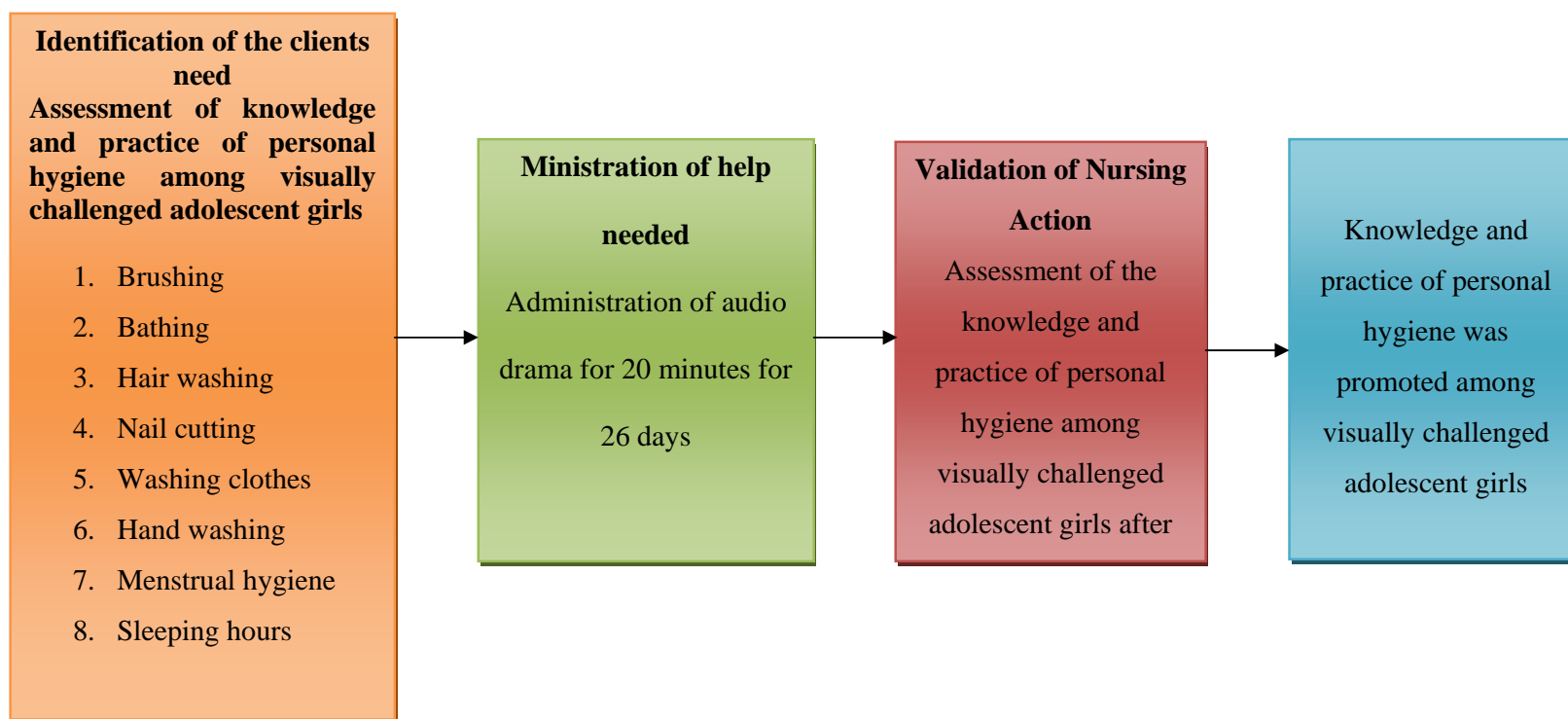
1.5. CONCEPTUAL FRAMEWORK

Nursing theory is very important to the profession of nursing. Ernestine WidenBach (1964), a progressive nursing leader who is probably known for hard work in theory development and public health nursing. According to her, nursing is nurturing and caring for someone in a motherly fashion. It is helping service that is rendered with compassion, skill and understanding to those in need of care, council and confidence in the area of health.

Wieden Bach believed that there are four main elements to clinical nursing which includes philosophy, purpose, practice and art. The art of nursing includes understanding clients needs and concern (identification of the clients needs), developing goals and actions intended to enhance client's ability (ministration of help needed) and directing the activities related to the nursing plan to improve the clients action (validation of the action). A nurse's activity is centralized on prevention of complication, related to recurrence or development of new concern.

In the present study, the researcher assessed the knowledge and practice on personal hygiene like brushing, bathing, hair washing, cleaning clothes, cutting the nails, menstrual hygiene and sleeping hours among visually challenged adolescent girls through interview schedule on one to one basis respectively. As ministration of help needed, the researcher administered audio drama which includes recorded conversation between two adolescent girls for about 20 minutes regarding the techniques and importance of hygienic practices. As validation of action, the audio drama was played daily for 26 days and assessment of personal hygiene knowledge and its practice before and after audio drama was done. Assessment of knowledge and practice on personal hygiene score was interpreted as poor, average, good and very good. Effect of audio drama on personal hygiene was checked by analyzing the significant difference between before and after audio drama on knowledge and practice on personal hygiene.

FIG. 1.1.
CONCEPTUAL FRAMEWORK BASED ON WIDENBACH'S HELPING ART OF CLINICAL NURSING (1964)



Source: Wesley (1994)

1.6. PROJECTED OUTCOME

Audio drama among visually challenged adolescent girls helps to promote the knowledge and practice aspects.

REVIEW LITERATURE

Literature review is an essential component for the researcher for a greater understanding of the research problem and its major aspects. It provides the investigator with an opportunity to evaluate different approaches to obtain the most current facts, and selection or development of the theoretical or methodological approaches to the problem.

The Literature reviews are arranged in the following sections:

- 2.1. Literature related to Adolescence
- 2.2. Literature related to Visual Impairment
- 2.3. Literature related to Personal Hygiene
- 2.4. Literature related to Audio drama and Personal Hygiene.

2.1. LITERATURES RELATED TO ADOLESCENCE

Adolescence is the most important and sensitive period of one's life. Adolescence is considered as most fascinating period as well as a period of great complexity that marks a vital stage in human development.

World Health Organization (WHO) Expert Committee, defined adolescence is the period between 10- 19 years, the second decade of life. Adolescence is a time of extreme introspection. Adolescent are strength of the society and future citizens of the world. Developing every healthy adolescent contributes to build a healthy future. One in every five persons in the world is an adolescent.

In the world's population about 19 % are in the age group of 10 to 19 years, and it was estimated that 25 % of the Indian population lies in the age group of 15 to 25 accounting for the 138 million persons. Researcher also noted that adolescent girls between the age group of 10-19 years comprise about 22 % of the female population in India (Khanna, et al., 1994).

In India, 2 % of the population comprises of adolescents (National Youth Policy, 2000). Around 239 million adolescents in India are in the age group of 10-19 years (Government of India, 2011). As per WHO there are over 1.4 million visually impaired between age group of 0-14 years and estimated 1.4 million under 15 years of age are blind (WHO, 2004).

Although adolescents are thought to be healthy many adolescents are die prematurely and also they are facing many problems related to their home, self, in school. This includes poor rapport with parents, lack of communication, low socio-economic background, generation gap, depression, neglect from others, lack of friends, caste related problems and atmosphere. Therefore, a cautionary note for all those who work with adolescents and youth may be researchers, practitioners, employers, policy makers and parents not to have a universalistic notion about adolescence. Adolescence needs to be understood in historical and cultural context and its variegated and tentative nature be acknowledged and appreciated (Larson Bradford Brown & Mortimer, 2002).

Understanding that low levels of fitness are a problem among the disabled population, and implementing strategies that have been successful in increasing these levels, may help to improve the quality of life for these individuals (Steiger& Lindsay Kathleen, 2009).

2.2. LITERATURE RELATED TO VISUAL IMPAIRMENT

Based on data from the survey of Income and program participation 189,000 children in age group of 6-14 years (0.5 %) have difficulty in seeing words and letters in ordinary newsprint even when wearing glasses or contact lenses. Of those 42,000 have a severe visual impairment and 14,700 having non-severe visual impairment (Steinmetz, 2006).

A study conducted among the attendees of blind centers to provide demographic information about low vision in blind centers at Khartoum state. The results reveals that 39.7 % of the subjects in blind centers had low vision which can be improved with proper low vision aids. Thus it concludes that there should be a great need for ophthalmologists and optometrists to aware about causes and functions effectively (Mohammed Ali, Elsheik & Elaward, 2009).

Findings from the National Longitudinal Transition study (NLTS) indicate that 57 % of youth with visual impairment has attended post secondary schools in comparison to general population 68 % has attended their higher education (Black Orby & Wagner, 1996).

This approach has revealed that most of the functional difficulty associated with dual sensory loss may be attributable to vision loss rather than hearing impairment, in as much as vision is the primary sense for obtaining information (Hershberger, 1992).

A cross- sectional study on Visual Impairment and Its Impact on Health-related Quality of Life in Adolescents (11-18 years) reveals that Healthy adolescents with visual impairment experienced statistically high whereas clinically impaired not having good health related Quality of Life, but refractive errors did not appear to have an impact on health related Quality of Life (Wong, Yin Wong & Mei Saw, 2009).

An assessment study conducted in German regarding personal hygiene and sex education of young girls reveals that sexual education of young girls and guidance for their personal hygiene are closely related (Mittag, 1986).

Intervention improves Health Hygiene and habits in slum kids by social welfare, this Study revealed that Impact of Hygiene after intervention of self education tool was above 50 % of boys and girls body cleanliness is improved from grade of partially satisfactory to the grade of satisfactory and unsatisfactory grade was reduced to 36 % to 7 % (Desetty, et al., 1997).

2.3. LITERATURE RELATED TO PERSONAL HYGIENE

Prevention is better than cure, and keeping up with personal hygiene to maintain health is an effective way to do that. Personal hygiene should be a necessary part of any individual's life to prevent illness and diseases. This would include regular brushing, bathing, clean and ironed clothes, groomed hair, cut finger nails, and

polished shoes. Often people who do not take care of their personal hygiene such as, body odor or have bad breath may face discrimination and therefore can cause psychological and mental issues. To create awareness of the importance of personal hygiene, students repeatedly get assigned to write a term paper on personal hygiene to maintain health.

Studies have shown that poor health, hygiene and nutritional status of visual impaired children is a barrier to attendance and educational attainment and therefore plays a crucial role in enrollment, retention, and completion of school education with special classes on hygiene (Rana & Das, 2004).

Texas School for the Blind and Visually Impaired published a booklet of instructional research called Independent Living “A Curriculum with Adaptations for students with Visual Impairments”, designed for teaching in public schools, residential schools and rehabilitation centers, which acts as a tool used for educating visual impairment students to take care of themselves and maintain their personal environments (Robin Loumiet & Nancy).

A study showed that attitude towards Knowledge and Practice of Personal Hygiene among Secondary School Students was considered to be important because WHO data on the burden of disease shows that approximately 3.1 % of deaths and 3.7 % of disability -adjusted-life-years (DALYs) worldwide are attributable to unsafe water, sanitation and hygiene. Mainly in Africa and developing countries in South East Asia 48 % of all disease burdens is attributable to these factors. Therefore, this study is justifiable by the fact that personal hygiene is indeed a pressing problem and requires a lot of input as studies, research and finances towards reducing the

effects of improper hygiene and raising the standard of living especially in sub-Saharan Africa (Ikeja, 1998).

The foremost work of every person in a fresh day should be taking proper oral care. It is must always brushing the teeth in the morning and before going to bed. One should make regular appointments with dentist and get the teeth and gum check- up frequently. A study was conducted among Canadian Dentists shows that 42 % of Canadian private dentists refused to treat disabled patients while 10 % were uncomfortable in treating these patients (Smith, 1989).

Proper brushing is essential for cleaning teeth and gums effectively. Proper brushing was emphasized by techniques like brush the outer tooth surface in vibrating circular motion, maintain 45 degree angle with bristles contacting the tooth surface and gum line, inner tooth should be brushed up and down and rolling motion, tilt the brush vertically and make up and down strokes, for biting surface use gentle back and forth scrubbing motion. This technique and importance of proper brushing has given from Family Gentle Dental Care (Dan Peterson, 2008).

A study investigated that the dental health knowledge and oral hygiene practices of 95 students with visual impairment and 286 sighted in Taiwan. It was found that the students with visual impairment was less knowledgeable about dental health and less frequently completed oral hygiene practices than sighted ones (Chang, Sophie, Shih & Hung, 2004).

A survey was conducted among visually impaired women and general women, about the importance of twice brushing a day or after each meal. Results reveal that 78 percent were brushing after each meal in 2003 whereas in those days of 1997's it was 75.4 %. The daily use of dental floss or an inter dental cleaner rose slightly to 50.5 % in 2003 when compared with 1997's it was 48.2 % (American Dental Association, 2008).

Since people meet each other daily and their social interactions can be very embarrassing if they do not take care of their personal hygiene. The foremost thing one should make a habit, is to take a bath daily. Our skin releases the waste as toxins through pores which may get clot with germs if we do not bathe regularly. Therefore, talking about the importance of bathing is necessary and fundamental step in personal hygiene to maintain health (Potter & Perry, 2005).

Bathing should be an activity that must be done every day to cleanse the body, but some people are lazy to take bath. If not taking bath regularly, the dirt on the skin will be thicker and inhibit perspiration and also lead to cause itches, scabies and rashes. A survey among 51 adolescent girls conducted to know how many times a person can take bath in a week, reveals that 41.8 % voted for seven days everyone has to take bath and 15.69 % suggested that taking more than one bath or shower a day (Luxury Sky Villas, 2010).

Taking care of our hair prevent them from falling and keeps the scalp healthy. Cleaning also keeps lice and dandruff infections in control. A study conducted among adolescent girls in Rune district; regarding the hygienic practices mainly hair washing reveals that one hundred thirty two girls 54.3 % washed their hair daily, 34.9 % twice

a week and 10.7 % once a week. 135 girls (55.5 %) used shampoo, 40 (16.5 %) soap, 86 (35.4 %) shikakai and the rest besan (powdered gram flour). Only 13 girls (5.5 %) reported the presence of lice in their scalp (Ratna Majumdar & Ganguli, 2000).

Hands are one of the most active things that contain bacteria and may get used to spread diseases and health issues. Hence, it is vital to wash hands with an anti-bacterial soap especially after using the bathroom, before and after eating food, after touching your pets and other animals, handling garbage and after sneezing or coughing. Hand washing for hand hygiene is the act of cleaning the hands with or without the use of water or another liquid, or with the use of soap, for the purpose of removing oil, dirt, and microorganisms. It is well documented that one of the most important measures for preventing the spread of pathogens is effective hand washing (Centers for Disease Control and Prevention, 2007).

As a general rule, hand washing protects people poorly or not at all from droplet and air borne diseases. It protects best against diseases transmitted through fecal – oral route and direct physical contact. Hand washing is an easy way to prevent infection. Public health and safety suggested the steps of how to wash hands and when to wash hands, to prevent the spread of micro organisms (Mayo Clinic staff, 2007).

Once hand-washing involves pouring water and a rubbing action then its effectiveness increases considerably. The use of soap and/or larger quantities of water show further improvements. These findings are in general agreement with a study in Bangladesh (Hoque & Briend, 1991).

A hygiene based intervention study was conducted in rural Northeast Thailand regarding in promotion of hand-washing and dish-washing behavior to improve their health. Interventions like songs about the hygiene messages were recorded in the traditional folk music and tapes of this, as well as the community-produced play, were broadcast over village loudspeaker towers and the results revealed that there was a significant improvement in hand washing and dish washing behavior (Pinfold, 1998).

Personal hygiene during menstruation explored including information about bathing and showering, and using sanitary pads and frequency of changing the pads, hands washing with soap after coming from rest room are emphasized. Menstrual hygiene – changing tampons and sanitary towels every 4 hours during menstruation and washing at least daily prevents body odor, infection and skin irritation (Mayo Clinic Staff, 2007).

A study regarding hygiene in children and adolescents revealed that feminine hygiene in concern not only in the reproductive years, but should be observed throughout the life. Thus proper education and guidance of little girls are essential (Dashiffc, 1987).

A study among adolescent girls understanding level of menstruation knowledge revealed that girls viewed themselves as prepare for menarche and claimed that had discussed it with their mothers. Their explanations of menstruation reflected as they are having incomplete knowledge and more typically a variety of misconception and ignorance (Rierden, 1995).

An assessment study was conducted on menstrual knowledge and practice among secondary school girls in Nigeria among 352 randomly selected healthy Nigerian school girls. The result revealed that 187 (53.1 %) had attained menarche, among 40 % of subjects were deficient in knowledge about menstruation whereas menstruation knowledge was higher in post menorrheal girls (Kuley, 1999).

A study was conducted among 791 students, 87 % of the students were in the age group of 16-17 years, and around 83 % of the students were Hindus. A majority of the parents were literate; the results revealed that the students had a good knowledge regarding age at first menses and genital hygiene at pre-test. Almost half the students were not aware of the term ovulation. Their knowledge regarding menstruation and menstrual hygiene improved significantly from 77.2 to 95.6 % and 91.8 to 100 % respectively after education as given as intervention. This study clearly showed that an educational intervention program can bring about a desirable change in knowledge among adolescent girls regarding reproductive health (Megachandran, Reeta & Gupta, 2000).

Nails are very important in one's appearance. Keep our nails looking good by clipping them once a week to an even length; one popular choice is 3-6 millimeters above the skin. Clean under your nails every day (Chelsea day, 2010).

Nails should not be allowed to grow more than forty days at a stretch. The glorious Prophet (SAW) and the pious companions (RA) would clip their nails every week. Nail clipping every Friday is desirable if it may be inconvenient, then once in a fortnight is advisable. Start cutting the nails from pointer of the right hand and finish with the little finger. Then start cutting the left hand beginning from the little finger

and finish the thumb and finally cut the nails of the right thumb. When clipping the nails of toes it should begin with small toe of the right foot and end with the big toe of the left foot and with the small toes of the same foot (Zahir-ud-din, 1990).

A study conducted among general population by Natural nail care, revealed a list of steps to keep the nail clean and cut perfectly which emphasized that cut the nails once in a week, keep clean the cuticle gently with orange sticks or clean cotton pads, cuticle nippers, soak the nail under water before cutting helps for easy cutting (Hong Kong Trade Development Council, 2011).

It is significant to change clothes and socks every day, as they are a primary source of contagious diseases and viruses. Clean clothes are very important as sweat will be absorbed into clothing and turns dirty. Cotton dresses are best, as its natural fibers are less likely to smell or irritate. Changing the inner wear daily and other clothes that may be sweaty, particularly after sport or any activity (Skeleton, 2007).

A study conducted among the adolescent girls in Jamaica reveals those comb the hair and wash their clothes were improved after the education program. It explains the steps in washing the clothes and keeps it clean (Fernald & Gardner, 2003).

Foot care is important- keep them clean, look after toe nails and soak the feet occasionally too is a great stress relieving therapy. Wearing chappals whenever and where ever going outside to prevent infections and worn infestation. A study conducted among the adolescent girls in rural area of Kolar district to assess their nutritional status and hygienic practices which reveals that anemia is mainly affecting

those who are not using chappals during defecation and whenever going outside (Shivaramakrishna, Deepa & Saritha Reddy, 2011).

Cognition, memory, Safety, mental health and weight are all affected by inadequate sleep. This research highlights mainly biological and social factors contributing to insufficient sleep in adolescents and exploring several recommendations for sleep hygiene practices and to stimulate sleep (Susan Kohl Malone, 2011).

Proper rest and sleep are as important to good health as good nutrition and adequate exercise. Without proper amounts of rest and sleep, the ability to concentrate, make judgments and participate in daily activities and irritability increases (Potter & Perry, 2005). Most adolescent life style issues fell in the age group of 16-18 years. Females were more depressed than males and had more sleep problems. Substance abuse and other addictions were documented in males. Watching television or listening music was stated as the most common late night activity (61.8%). It reveals 58.9 % said that as that at least 6- 8 hours of sleep each day was essential. And hence 41.5 % of depressed females were sought of treatment for it (Malone, 2011).

2.4. LITERATURE RELATED TO AUDIO DRAMA AND PERSONAL

HYGIENE

Mavis Mayo, 1988 has done a project called the Development through Radio Project (DTRP) to show how radio has been used with rural women to communicate developmental information regarding hygiene and other issues. It was revealed that

among other technologically based mass media, only radio had the capacity for rural out reach (Chido Matewa, 2002).

Kapilvastu, a creative song and drama to promote good hygiene and build a clean Nepal. This was initiated by UNICEF seven years ago, National Sanitation Action week has proven crucial in protecting children's health in Nepal, where poor hygiene and a lack of sanitation facilities are responsible for about 70 % of childhood illnesses (Sagun, 2000).

UNICEF has released a booklet on menstrual hygiene management along with audio CD's which is the most important method of teaching visually challenged adolescent girls because menstrual hygiene is a big issue and its management is seen as empowering them with knowledge which enhances their self-esteem and academic performance (Sreeraman, 2008).

Scottish sensory centre, Moray house school of Education, University of Edinburgh, Issy Colo-Hamilton has conducted a research study on sex education for children and young people with multiple disabilities through models, audio tapes and videos. Finally they suggested that to develop work on teaching sessions on sex education to children and young people with complex disabilities including visually impaired, working with BBC to develop audio drama and audio CD's to teachers and care takers to establish examples of good practice and disseminate these widely.

A study conducted among visually impaired students of 16-25 age groups at K. J. Somaiya College of education, to spark in the young minds of many visually impaired college going girls by training them in etiquette, communication skills, self-

managing skills and life skills, thus inculcating them in a winning attitude. This is a Project called Project Priyadharsini, where they train them through Lecture, demonstration, role-play and discussions. The aim of the study is to teach and motivate them to succeed in their life without anybody's support (Vasundara, 2006).

A study conducted among self- help group women and disabled girls regarding disaster preparedness, prevention of epidemic diseases during post-disaster scenario, general health and hygiene practices. The tools used were audio and video formats for communicating the information and create awareness and improve the practices on general health and disaster preparedness. The study results revealed that there is significant improvement mainly observed through audio format (Sunitha, Rajarathnam & Shankar Narayan, 2011).

An episode on special series of personal hygiene among adolescent girls through an intervention called Learning By ear which is a new multimedia distance learning programme which brings knowledge to every corner, it's a recorded conversation regarding personal hygiene among girls to create awareness and improve their practice on hygiene (Zainab Aziz, 2008).

METHODOLOGY

The present study was designed to evaluate the effect of audio-drama to promote personal hygiene among visually challenged adolescent girls. This chapter enumerates the description of the research approach, design, setting, population, criteria for sample selection, sampling, development and description of the data collection tool, method of data collection, variables of the study, materials, hypothesis, pilot study, main study and techniques of data analysis.

3.1. RESEARCH APPROACH

The present study was aimed at determining the effect of audio drama to promote personal hygiene among visually challenged adolescent girls. Hence, the present problem of investigation was approached as a quantitative research.

3.2. RESEARCH DESIGN

Quasi Experimental one group pre-test post-test design was found to be appropriate for the study, as it evaluates the effect of audio drama to promote personal hygiene among visually challenged adolescent girls.

3.3. SETTING

The study was conducted at Sri Avinashilingam Educational Trust Institutions, which has Sri Avinashilingam Girls Higher Secondary School and Home Science College for Women as a Deemed University, located at Mettupalayam road, Coimbatore. The School has separate Special Education Department where 4 Specially Trained Teachers and one assistant are working and they provide training and education to special children with Mental Retardation, Visually Impairment, Deaf

and Cerebral Palsy. The total strength of Special Education Department was 35 including all disabilities. The school timings were 8.30 AM - 3.45 PM. The visually challenged adolescent school girls have to attend regular classes along with that they have to attend special classes during Physical Training (P.T) classes and daily one hour between 4-5 PM. The college timings were 10 AM – 4 PM where visually challenged adolescent girls have to attend the regular classes along with this special computer training for one hour daily between 3 – 4 PM were given. Among the total population of 37 visually challenged adolescent girls, 30 are from college and 5 of them are visually impaired with deafness, 10 of them are day scholars and 7 are from school among them one was from hostel and remaining were day scholars.

3.4. POPULATION

The target population for the present study was Visually Challenged Adolescent Girls.

3.5. CRITERIA FOR SAMPLE SELECTION

The sample of subjects were taken based on following inclusion and exclusion criteria.

Inclusion Criteria

Adolescent girls with Visually Challenged due to cataract, glaucoma and trachoma, Diabetic retinopathy, Macular degeneration, Optic atrophy due to Meningitis, uncorrected refractive errors and Xerophthalmia.

Exclusion Criteria

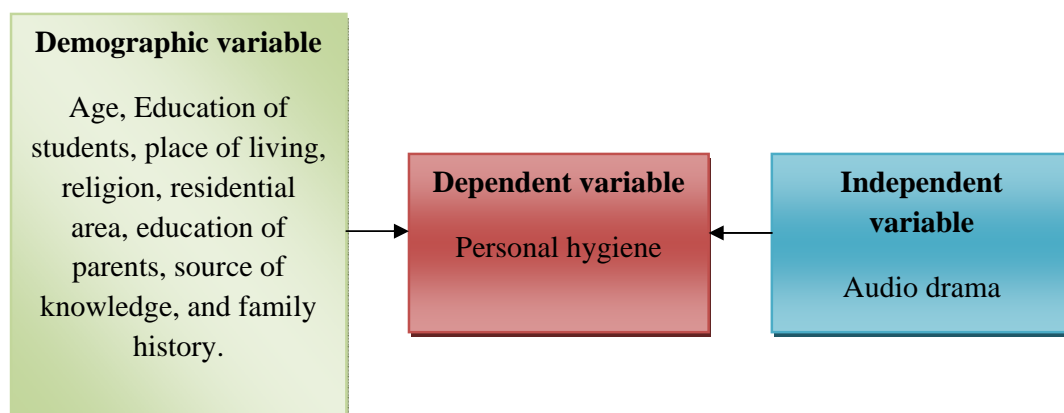
1. Visually challenged with deafness and mentally challenged along with visual impairment.
2. Visually challenged adolescent girls who are not willing to participate.

3.6. SAMPLING

Among the total population of 37 visually challenged adolescent girls, 30 are from college among them 5 are visually impaired with deafness, 11 of them are day scholars who are not willing to participate, hence 14 were taken from college and 7 were from school among them one from hostel and remaining are day scholars, hence total of 21 visually challenged adolescent girls were selected by using purposive sampling technique.

3.7. VARIABLES OF THE STUDY

The independent variable in the present study was audio drama and dependent variable was personal hygiene.



3.8 MATERIALS

The following tools were used for data collection.

3.8.1. Demographic Profile

3.8.2. Questionnaire for assessing Knowledge on Personal Hygiene

3.8.3. Checklist for Assessment of Practice on Personal Hygiene

3.8.4. Audio Drama

The researcher has developed this questionnaire to assess the knowledge and practice of personal hygiene among visually challenged adolescent girls. The data is collected with the Questionnaire through interview schedule, on one to one basis.

3.8.1. Demographic Profile : Demographic profile consists of age, education of students, place of living, religion, residential area, education of parents, source of knowledge and family history on personal hygiene.

3.8.2. Questionnaire for assessing Knowledge on Personal Hygiene : The questionnaire consists of 32 items, about Brushing, Bathing, hair washing, cutting of nails, hand washing, washing the clothes, menstrual hygiene and sleeping habits as choose the best answer and it was asked through one to one basis. The second question has eight options each scores 1 mark and total mark for that item were 8 marks. The score of each correct response is scored as 1 mark and the wrong response scored as 0 marks. Maximum score is 39 and Minimum score is 0. The scores were interpreted as 0-10 poor knowledge, 11-20 Average, 21-30 Good knowledge, 31-39 very good knowledge.

3.8.3. Assessment of Practice on Personal Hygiene : The Checklist consists of 44 questions regarding the practice on personal hygiene as one to one basis in which yes scores 1 mark and no scores 0 mark. Maximum score is 44 and minimum score is 0 marks. The interpretations were given as 0- 12 Poor practice, 13-22 Average practice, 23-32 good practice and 33-44 very good practice on personal hygiene.

3.8.4. Audio Drama : The audio drama is a recorded conversation between two adolescent girls on techniques and importance of hygienic practices which includes brushing, bathing, rinsing mouth, hand washing, washing clothes, menstrual hygiene, wearing chap pals, sleeping hours which is played for duration of 20 minutes.

Procedure

- STEP 1: Arrange for audio drama, setting the laptop and speakers to be connected and seating arrangements correctly
- STEP 2: The visually challenged adolescent girls are made to sit comfortably in the common room.
- STEP 3: Explain to them about audio drama and instruct them to maintain silence to hear clearly.
- STEP 4: Play the audio drama for duration of 20 minutes each day.
- STEP 5: Discuss their doubts and make them clear in all aspects of the Audio Drama.

3.9. HYPOTHESES

- H₁: There is a significant difference between knowledge on personal hygiene before and after audio drama.

H₂: There is a significant difference between practice on personal hygiene before and after audio drama.

H₃: There is a significant difference between knowledge and practice on personal hygiene before and after audio drama.

3.10. PILOT STUDY

A Pilot study was conducted to check the feasibility, practicability and validity. The setting of the study was C.S.I. Girls Higher Secondary School, Uppilipalayam, Coimbatore for a period of 10 days. Purposive sample of 10 visually challenged adolescent girls were selected for the study. Demographic profile was collected from each visually challenged adolescent girl. A pre-test was done with the questionnaire through interview schedule on one to one basis among the visually challenged adolescent girls. Audio drama was played for 20 minutes each day for duration of 8 days and post-test was done using the same tool. Data collected were analysed and tabulated using descriptive and inferential statistical methods and results shows that there was significant improvement in knowledge and practice on personal hygiene among visually challenged adolescent girls. Hence, the study is feasible and practical.

3.11. MAIN STUDY

The data was collected for a period of 30 days. The study was conducted at Sri Avinashilingam Girls Higher Secondary School and Home Science College for women. Among the total population, 7 visually challenged adolescent girls were from school and 14 were from college, hence 21 visually challenged adolescent girls were taken for the study by using purposive sampling technique. Demographic profile was

collected from each visually challenged adolescent girl. A pre- test was done with the questionnaire through interview schedule on one to one basis among the visually challenged adolescent girls. Audio drama was played for 20 minutes each day for duration of 26 days in a calm and quiet room. Post test was conducted using the same questionnaire through interview schedule after audio drama.

3.12. TECHNIQUES OF DATA ANALYSIS AND INTERPRETATION

Appropriate statistical tools such as descriptive statistics and inferential statistics were applied to analyze the data. Descriptive statistics was used for analysis of demographic variable, analysis of knowledge and practice on personal hygiene. A frequency table was formulated for all significant information. Inferential statistical method used for the study was paired 't' test and Karl Pearson's Co-efficient of correlation. Paired 't' test was used to find the effect of audio drama in promotion of knowledge and practice on personal hygiene among visually challenged adolescent girls. Karl Pearson's Co-efficient of correlation was used to determine the degree of relationship between selected variables and their knowledge and practice on personal hygiene among visually challenged adolescent girls.

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the methods and techniques of data analysis and their interpretation. The study was intended to find the effect of audio drama to promote personal hygiene among visually challenged adolescent girls. A total sample of 21 visually challenged adolescent girls was enrolled in the study. The data collected were grouped and analyzed using descriptive and inferential statistics.

SECTION – I

4.1. DEMOGRAPHIC PROFILE PRESENTATION

The Demographic profile of the visually challenged adolescent girls were collected in terms of their age in years, education of students/class, place of living, residential area, education of parents, family history and source of knowledge on personal hygiene. These data was presented in the form of tables and graphs.

TABLE 4.1.
DISTRIBUTION OF DEMOGRAPHIC PROFILE

(N=21)

Demographic Variables	No. of Subjects		Percentage (%)		
Age in Years					
Middle Adolescents (13-16)	4		19		
Late Adolescents (17-19)	17		81		
Class / Education of Students					
9 th	1		5		
11 th	2		10		
+2	4		19		
UG	14		66		
Place of Living					
Hostel	11		52		
Day scholar	10		48		
According to Residential Area					
Rural	7		33		
Urban	14		67		
Education of Parents		F	M	F	M
High School (6 – 10 th)	6	6	29	29	
Higher Secondary (11 th – 12 th)	1	3	5	14	
Degree / Diploma	6	5	29	24	
Illiterate	8	7	37	33	
Source of knowledge					
Parents	21		100		
Friends	1		5		
Teacher	2		10		
According to family history					
Yes	4		19		
No	17		81		

Among 21 visually challenged adolescent girls majority (81 %) were late adolescents and 19 % were middle adolescents. The education classification reveals that 5 % from 9thstd, 10 % from 11th std, 19 % were from +2 and 66 % were undergoing Under Graduation programme. The above table also reveals that 52 % were staying in Hostel and 48 % were Day scholar. All of the visually challenged adolescent girls were from Hindu religion. The residential area distribution reveals that 33 % were from rural areas and 67 % from urban areas. Education of parents includes, 38 % of Fathers and 33 % of mothers were illiterate, and 62 % of father and 67 % of mothers were literate. All the visually challenged adolescent girls gained their source of knowledge mainly from parents and additionally 5 % from their friends and 10 % from teachers. Majority (81 %) of them were not having any family history whereas only 19 % were having family history of visual impairment among their brothers and sisters and their relatives.

FIG. 4.1.
AGE DISTRIBUTION

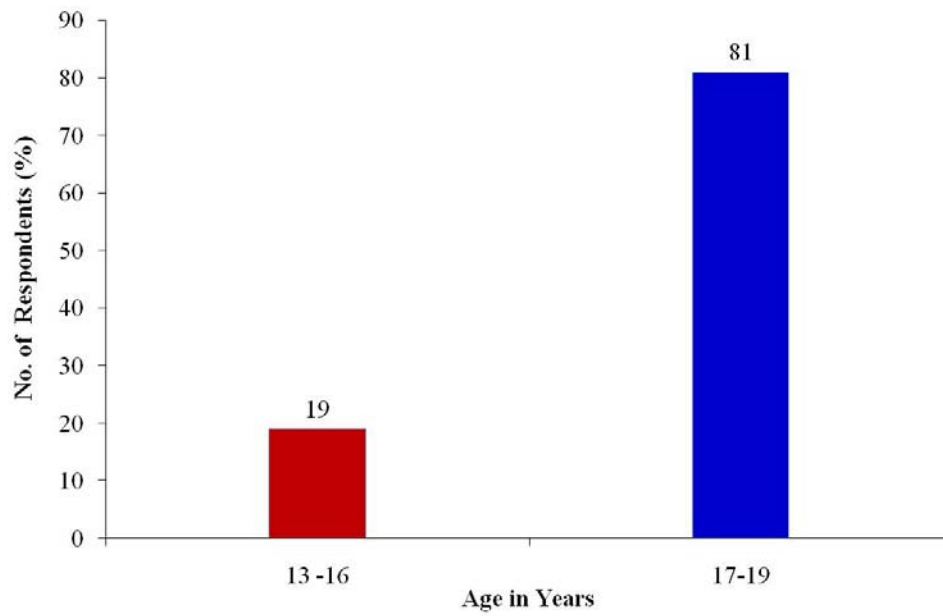


FIG. 4.2.
DISTRIBUTION OF EDUCATION OF STUDENTS

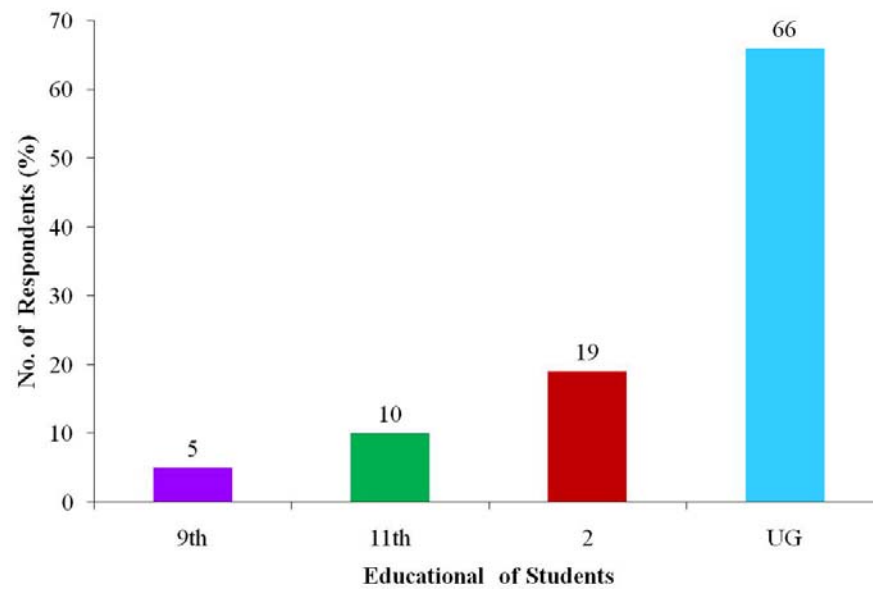


FIG. 4.3.
DISTRIBUTION OF PLACE OF LIVING

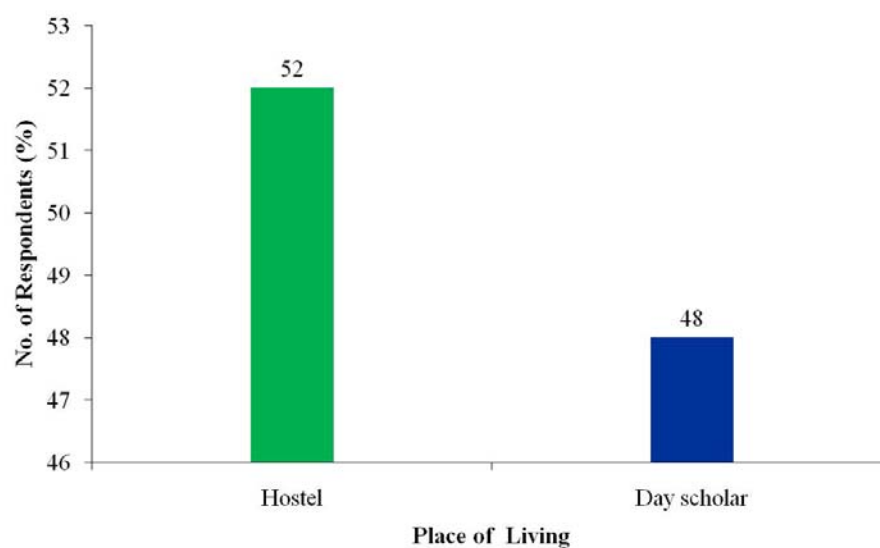


FIG. 4.4.
DISTRIBUTION OF RESIDENTIAL AREA

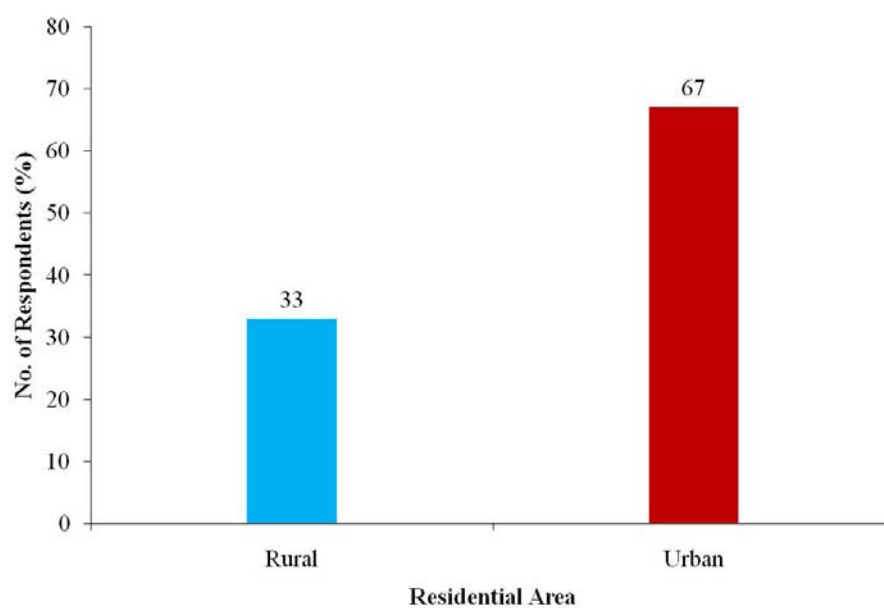


FIG. 4.5.
DISTRIBUTION OF EDUCATION OF PARENTS

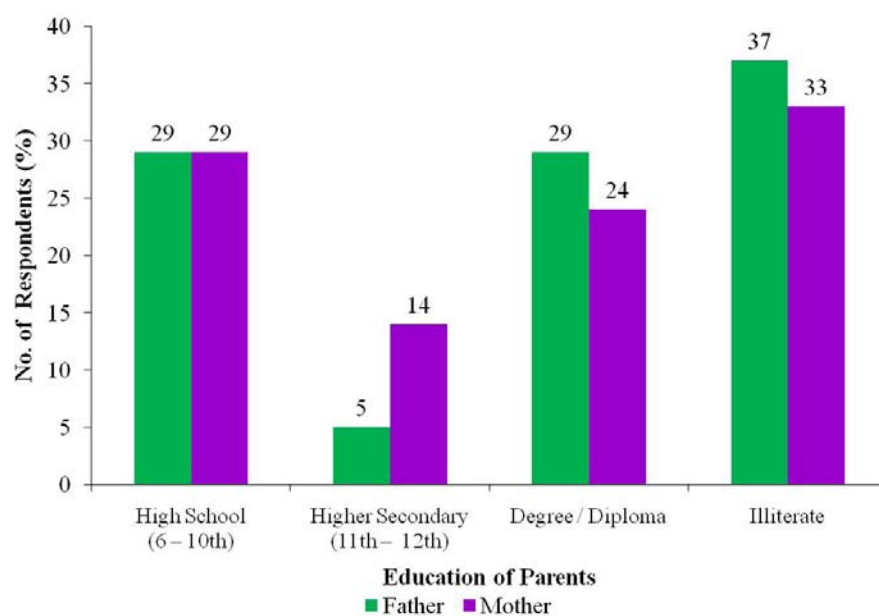
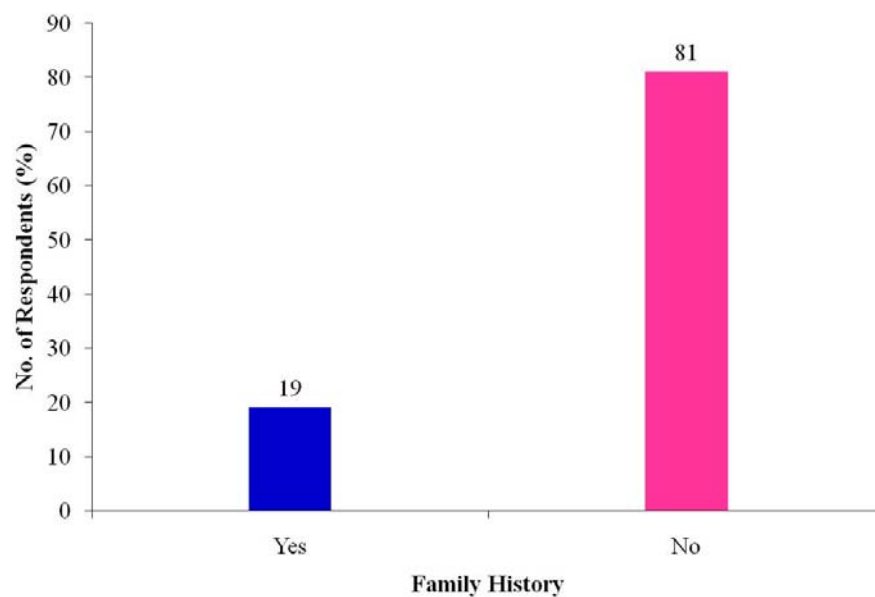


FIG. 4.6.
DISTRIBUTION OF FAMILY HISTORY



SECTION – II

TABLE 4.2.
LEVEL OF KNOWLEDGE AND PRACTICE ON VARIOUS COMPONENTS
OF PERSONAL HYGIENE BEFORE AND AFTER AUDIO DRAMA

(N=21)

Components	Knowledge (%)		Practice (%)	
	Before Intervention	After Intervention	Before Intervention	After Intervention
Brushing	67	100	70	93
Bathing	73	100	75	100
Hair Washing	74	96	68	85
Nail cutting	74	95	68	99
Hand Washing	93	100	74	95
Menstrual hygiene	74	90	66	83
Washing clothes	84	98	89	100
Sleeping and Habit of Wearing Chappals	86	95	99	100

The above table reveals the level of knowledge and practice of visually challenged adolescent girls on various components of personal hygiene before and after audio drama. Mean percentage on various components signifies that the level of knowledge and practice has increased after intervention. The scores in bathing aspect among the visually challenged adolescent girls show that they have gained cent percent knowledge and practice level respectively. Additionally in knowledge aspect, they have gained cent percent scores in brushing and hand washing components also. In practice area, they have cent percent scores in washing clothes and habit of wearing chappals. The overall view of the table reveals that, audio drama was effective in improving the knowledge level and practice skills of the visually challenged adolescent girls on personal hygiene.

4.2. ANALYSIS ON LEVEL OF KNOWLEDGE AND PRACTICE OF PERSONAL HYGIENE BEFORE AND AFTER INTERVENTION

The mean, mean percentage and standard deviation was used to determine the level of knowledge and practice on personal hygiene before and after intervention among visually challenged adolescent girls.

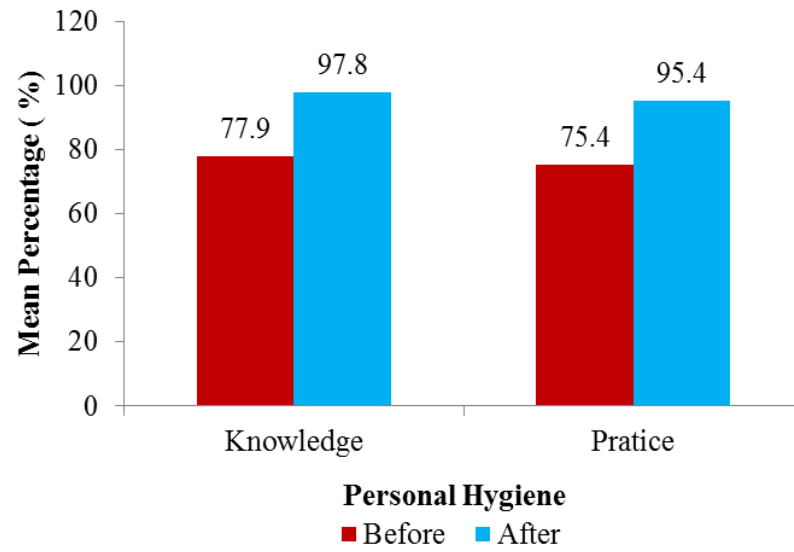
TABLE 4.3.
LEVEL OF KNOWLEDGE AND PRACTICE OF
PERSONAL HYGIENE BEFORE AND AFTER INTERVENTION

(N = 21)

Domains	Before			After		
	Mean	Mean %	SD	Mean	Mean %	SD
Knowledge	30.4	77.9	0.23	38.1	97.8	1.18
Practice	33.2	75.4	3.82	42.0	95.4	1.43

From the above table it shows that the mean score of knowledge and practice on personal hygiene before intervention was 30.4 and 33.2 respectively. The mean score of knowledge and practice on personal hygiene after intervention was improved to 38.1 and 42.0 respectively. Thus audio drama promotes personal hygiene among visually challenged adolescent girls.

FIG. 4.7.
LEVEL OF KNOWLEDGE AND PRACTICE OF
PERSONAL HYGIENE BEFORE AND AFTER INTERVENTION



4.3. ANALYSIS ON KNOWLEDGE AND PRACTICE ON PERSONAL HYGIENE BEFORE AND AFTER AUDIO DRAMA

Paired 't' test was used to analyze the level of significant mean difference between the knowledge and practice scores before and after audio drama on personal hygiene.

TABLE 4.4.
SIGNIFICANT MEAN DIFFERENCE BETWEEN KNOWLEDGE SCORES
BEFORE AND AFTER AUDIO DRAMA ON PERSONAL HYGIENE

(N = 21)

Group	Mean	Mean %	S.D	't'
Before intervention	30.4	77.9	4.23	8.02 **
After intervention	38.1	97.8	1.18	

** Significant at 0.01 level

From the above table the mean knowledge score on personal hygiene among visually challenged adolescent girls before and after audio drama was 30.4 and 38.1 respectively. This reveals that there is a difference in the knowledge level.

The calculated 't' value 8.02 was compared with the table value at 20 degrees of freedom with 0.01 level of significance. The calculated value was higher than the table value, thus the hypothesis H_1 : **"There is a significant difference in knowledge on personal hygiene before and after audio drama among visually challenged adolescent girls"** is accepted. Hence, there exists a significant difference in the knowledge level on personal hygiene among visually challenged adolescent girls before and after administration of audio drama. This reveals that audio drama improves the knowledge level of visually challenged adolescent girls on personal hygiene.

TABLE 4.5.
SIGNIFICANT MEAN DIFFERENCE BETWEEN PRACTICE
SCORES BEFORE AND AFTER AUDIO DRAMA ON
PERSONAL HYGIENE

(N=21)

Group	Mean	Mean %	S.D	't'
Before intervention	33.2	75.4	3.82	11.13**
After intervention	42	95.4	1.43	

** Significant at 0.01 level

From the above table the mean score of practice on personal hygiene among visually challenged adolescent girls before and after audio drama was 33.2 and 42.0 respectively. This reveals that there is a significant difference in the practice of personal hygiene.

The calculated 't' value 11.13 was compared with the table value at 20 degrees of freedom with 0.01 level of significance. The calculated value was higher than the table value, thus the hypothesis H₂: **“There is a significant difference in practice on personal hygiene before and after audio drama among visually challenged adolescent girls”** is accepted. Hence, there exists a significant difference in the practice on personal hygiene among visually challenged adolescent girls before and after audio drama. This reveals that audio drama promotes the practice on personal hygiene.

TABLE 4.6.
SIGNIFICANT MEAN DIFFERENCE BETWEEN KNOWLEDGE
AND PRACTICE SCORES BEFORE AND AFTER
AUDIO DRAMA ON PERSONAL HYGIENE

(N = 21)

Group	Mean	Mean %	S.D	't'
Before intervention	63.6	76.6	6.21	13.20**
After intervention	80.1	96.6	1.78	

** Significant at 0.01 level

The mean score of knowledge and practice on personal hygiene among visually challenged adolescent girls before and after audio drama was 63.6 and 80.1 respectively. The above table reveals that there is a significant difference in the knowledge and practice on personal hygiene.

The calculated 't' value 13.20 was compared with the table value at 20 degrees of freedom with 0.01 level of significance. The calculated value was higher than the table value, thus the hypothesis H₃: **“There is a significant difference between knowledge and practice on personal hygiene before and after audio drama”** is accepted. This reveals that audio drama promotes the knowledge and practice on personal hygiene among visually challenged adolescent girls.

SECTION -III

4.4. RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES ON KNOWLEDGE AND PRACTICE OF PERSONAL HYGIENE SCORE

Karl Pearson's co-efficient of correlation was calculated to find out the influence of selected demographic variables on knowledge and practice of personal hygiene score before intervention.

TABLE 4.7.
INFLUENCE OF DEMOGRAPHIC VARIABLES ON
KNOWLEDGE AND PRACTICE OF PERSONAL HYGIENE

(N=21)

Demographic variables	'r'
Age	0.46
Education of Students	0.47

The above results indicate the influence of the demographic variables on knowledge and practice of personal hygiene before intervention. There is a positive correlation exists between the age (0.46) and Education of students (0.47) on knowledge and practice of personal hygiene.

RESULTS AND DISCUSSION

The present chapter reveals the results and discussion in detail. The analyzed data is being discussed under various sections. 5.1 deals about demographic profile of visually challenged adolescent girls in terms of their age in years, education of students, place of living, residential area, education of parents, source of knowledge and family history on personal hygiene and 5.2 deals about the level of knowledge and practice on various components of personal hygiene before and after audio drama. 5.3 deals about the level of knowledge and practice of personal hygiene before and after intervention. 5.4 deals about the effectiveness of audio drama on knowledge and practice of personal hygiene among visually challenged adolescent girls and 5.5 deals about the relationship of age, education of students and family history.

5.1. FINDINGS RELATED TO DEMOGRAPHIC PROFILE OF VISUALLY CHALLENGED ADOLESCENT GIRLS

In the present study 21 visually challenged adolescent girls are included. Tables 4.1 represent the demographic profile of the adolescent girls. Among the visually challenged adolescent girls, majority of 81 % are from the age group of late adolescent whereas 19 % are middle adolescents. Among 21 visually challenged adolescent girls, majority of 66 % are under graduates, 19 % from 12th, and 10 % from 11th, only 5 % from 9th standard. These findings go in line with study conducted among students who have disabilities, with sensory impairments mainly visually challenged 73 % are the most likely to do graduate after secondary school education (Kaye, 1997).

In terms of place of living, 52 % are staying in hostel and 48 % are day scholars. Majority of 67 % are from urban areas and 33 % from rural areas this goes in line with report in which Tamil nadu places highest incidence rate in urban areas with incidence of 50 cases (Shukla, 2001).

Among parents 38 % of fathers and 33 % of mothers are illiterate and 62 % of fathers and 67 % of mothers are literates. The visually challenged adolescent girls gained their knowledge regarding personal hygiene mainly (100 %) from parents and additionally 5 % from their friends and 10 % from their teachers. Among them majority of 81 % are having family history of visual impairment of their siblings or relatives and 17 % are not having any family history.

5.2. LEVEL OF KNOWLEDGE AND PRACTICE ON VARIOUS COMPONENTS OF PERSONAL HYGIENE BEFORE AND AFTER AUDIO DRAMA

Table 4.2 represents the level of knowledge and practice of visually challenged adolescent girls on various components of personal hygiene before and after audio drama. Mean percentage on various components signifies that the level of knowledge and practice has increased after intervention. The scores in bathing aspect among the visually challenged adolescent girls show that they have gained cent percent knowledge and practice level respectively. Additionally in knowledge aspect, they have gained cent percent scores in brushing and hand washing components also. In practice area, they have cent percent scores in washing clothes and habit of wearing chappals. The overall view of the table reveals that, audio drama was effective in

improving the knowledge level and practice skills of the visually challenged adolescent girls on personal hygiene.

5.3. ANALYSIS ON LEVEL OF KNOWLEDGE AND PRACTICE OF PERSONAL HYGIENE BEFORE AND AFTER INTERVENTION

Table 4.3 represents the level of knowledge and practice of personal hygiene before and after intervention. This shows that the mean score of knowledge and practice on personal hygiene before intervention was 30.4 and 33.2 respectively. The mean score of knowledge and practice on personal hygiene after intervention was improved to 38.1 and 42.0 respectively. Thus audio drama promotes personal hygiene among visually challenged adolescent girls.

5.4. EFFECTIVENESS OF AUDIO DRAMA TO PROMOTE PERSONAL HYGIENE AMONG VISUALLY CHALLENGED ADOLESCENT GIRLS

The scores of knowledge and practice of personal hygiene obtained by the researcher were considered to analyze the significant difference in knowledge and practice of personal hygiene among visually challenged adolescent girls before and after the audio drama was improved.

In the table 4.4, the mean score of visually challenged adolescent girls was 30.4 before audio drama and it was found to be increased to 38.1 after audio drama thus it implies that there is a positive effect of audio drama in the promotion of knowledge on personal hygiene among visually challenged adolescent girls. The calculated 't' value was 8.02 and it was compared with the table value at 0.01 significant level which is 2.44. The calculated value was higher than the table value, thus the hypothesis H_1 : **"There is a significant difference in knowledge on personal**

hygiene before and after audio drama among visually challenged adolescent girls” is accepted. This proved that audio drama had effect on knowledge on personal hygiene among visually challenged adolescent girls.

Table 4.5, the mean score of practice of personal hygiene among visually challenged adolescent girls was 33.2 before audio drama and it was found to be increased to 42 after audio drama. Thus it implies that there is a positive effect of audio drama in the promotion of practice on personal hygiene among visually challenged adolescent girls. The calculated ‘t’ value was 11.13 and it was compared with the table value at 0.01 significant levels. The calculated value was higher than the table value, thus the hypothesis H_{02} : **“There is a significant difference in practice on personal hygiene before and after audio drama among visually challenged adolescent girls”** is accepted. This proved that audio drama had an effect on practice on personal hygiene among visually challenged adolescent girls.

Table 4.6, the mean score of visually challenged adolescent girls was 63.6 before audio drama on both knowledge and practice on personal hygiene and after audio drama it was improved to 80.1 on both knowledge and practice on personal hygiene among visually challenged adolescent girls. The calculated ‘t’ value was 13.20 and it was compared with the table value at 0.01 significant level. The calculated value was higher than the table value, thus the hypothesis H_{03} : **“There is a significant difference in knowledge and practice on personal hygiene before and after audio drama among visually challenged adolescent girls”** is accepted. This proved that audio drama had an effect on knowledge and practice on personal hygiene among visually challenged adolescent girls. This finding goes in line with the study

by Moray House School of Education, in Scotland regarding other hygienic practices like bathing, oral hygiene, hand washing, menstrual hygiene among children and young people with multiple disabilities especially visual impairment. They used models, videos and audio tapes to teach them and results suggested that to improve knowledge and to make them practice on hygienic practices audio method was best and we have to work with BBC to develop audio cassettes and dramas (IssyColo-Hamilton, 2007).

5.5. RELATIONSHIP BETWEEN AGE, EDUCATION OF STUDENTS AND ON KNOWLEDGE AND PRACTICE OF PERSONAL HYGIENE AMONG VISUALLY CHALLENGED ADOLESCENT GIRLS

Karl Pearson's coefficient correlation was used to assess the influence of age and education of students on knowledge and practice on personal hygiene among visually challenged adolescent girls.

It is found that age ($r = 0.46$) and education of students ($r = 0.47$) is positively correlated on knowledge and practice of personal hygiene which interpreted that age and education progress the knowledge and practice of personal hygiene among visually challenged adolescent girls. These findings are consistent with the findings from the National Longitudinal Transition study (NLTS) indicate that 57 % of youth with visual impairment has attended post secondary schools in comparison to general population 68 % has attended their higher education which improves their health (Black Orby & Wagner, 1996).

SUMMARY AND CONCLUSION

This chapter summarizes the major findings, limitations, implications in the field of nursing education, nursing practice, nursing administration, nursing research and recommendations.

This study was conducted with the objective to find out the effect of audio drama to promote personal hygiene among visually challenged adolescent girls. The conceptual framework of this study was based upon Wiedenbach's Helping Art Clinical Theory. Review of literature brought out many facts about adolescent girls, visual impairment and their hygienic practices and importance of audio drama when compared to other mode of teaching.

This study was conducted at Sri Avinashilingam Girls Higher Secondary School and Home Science College for Women, Coimbatore. A quasi experimental, one group pretest post test design was adopted for the study. Purposive sampling method was used to select the samples for the study. Total number of samples selected for the study was 21. Researcher prepared the questionnaire and through interview schedule on one to one basis assessed the knowledge and practice of personal hygiene. Audio drama which is the recorded format on steps, techniques and importance of personal hygiene was played as an intervention for 20 minutes per day for a period of 26 days. Reassessment was done after 26 days of intervention. Paired't' test was used to find out the significant difference before and after administration of audio drama. This study indicates that administration of audio drama improved the knowledge and practice of personal hygiene.

On analyzing the data, the result reveals that there is a significant difference on knowledge and practice of personal hygiene among the visually challenged adolescent girls before and after audio drama.

6.1. MAJOR FINDINGS OF THE STUDY

1. The demographic variable reveals that a maximum of 81 % of the respondents are from the age group of 17-19 years.
2. It reveals that a maximum of 66 % of the respondents are under graduates.
3. It also reveals that 52 % of the respondents are from hostel.
4. It reveals that all respondents are mainly from Hindu religion.
5. It reveals that on components of personal hygiene majority of the respondents are having very good knowledge and practice on personal hygiene before audio drama on hand washing (93 %) and sleeping hours and habit of wearing chappals (99 %) which improved to 95 % and 100 % respectively after audio drama.
6. It shows that on components of personal hygiene the knowledge level before intervention in brushing (67 %) and practice level before intervention on menstrual hygiene was (66 %) which improved to 100 % in knowledge level of brushing and 83 % in practice level of personal hygiene after audio drama.
7. This study shows that audio drama found to be effective in improving the knowledge on personal hygiene among visually challenged adolescent girls.
8. It also reveals that audio drama was found to be effective in improving the practice of personal hygiene.

6.2. LIMITATIONS

1. The study was limited only to adolescent girls.
2. The study was confined to small number of subjects and shorter period which limits generalization.
3. The study was limited only to girls with visual impairment.
4. The day scholars of respondents parents are not willing for the study.

6.3. RECOMMENDATIONS

1. The study can be replicated with a larger size for wider generalization of findings.
2. The study can be conducted in different setting.
3. The study can be conducted among all age groups.
4. Teachers and special trainers in special school can apply audio drama as routine teaching modality to visually impaired children.
5. A Comparative study can be undertaken between experimental and control group.

6.4. NURSING IMPLICATIONS

6.4.1. Nursing Education

Administration of audio drama is an effective method on teaching visually challenged adolescent girls to improve their knowledge and practice of personal hygiene. It is a traditional method of teaching and its implication needs wide knowledge and practice. This intervention should be taught to the nurses in special department and caretakers to play this drama even from the childhood. Caretakers and

teachers can utilize this method in teaching their visually challenged children at home and school. So, audio drama is encouraged in the nursing curriculum.

6.4.2. Nursing Administration

The Nurse administrator can draw written policies regarding this intervention to promote personal hygiene among visually challenged. Thereby the staff nurses are kept in pace with the evidence based practice.

6.4.3. Nursing Practice

The nursing researches are giving more importance on interventional studies on various areas. The present study has tested the effect of audio drama to promote personal hygiene among visually challenged adolescent girls. More researches that could be carried out in this area would be beneficial. The audio drama can also be used in teaching classes in schools, colleges and audio software's are used in computer. Teachers who are working in the special education unit can utilize this method of intervention in teaching the visually challenged students in all aspects along with other method of teaching.

6.4.4. Nursing Research

The effect of audio drama for the visually challenged group, both girls and boys all age group could be studied. The merits of audio drama over other methods of teaching could be studied.

6.5. CONCLUSION

Modern lifestyle is becoming more complicated and people are given importance based on their outward appearance rather than their inner feelings. Personal hygiene a word to teach and practice on everyone's daily activity because it is very important to maintain ones dignity in this materialistic world. Especially, for visually challenged adolescent girls who requires more effort to shine best in this world. Hence, the researcher adopted the best method of understanding for visually challenged adolescent girls through audio drama. The result revealed in the present study is with evidence that audio drama is effective in promoting their level of knowledge and practice on personal hygiene of visually challenged adolescent girls.

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ANNEXURE - I

Paired 't' test

To test the hypothesis, 't' test was applied to find out the significant difference personal hygiene before and after audio drama.

$$t = \frac{\bar{d}}{\frac{SD}{\sqrt{n}}}$$

$$SD = \sqrt{\frac{\sum (d - \bar{d})^2}{n}}$$

\bar{d} = Mean of difference between pretest and post test score

SD = Standard deviation of the pre-test and post test score

n = Number of samples

ANNEXURE – II

KARL PEARSON’S COEFFICIENT OF CORRELATION

This was calculated to find out the influence of independent variable on dependent variable. Influence of age, education, place of living, family history was assessed through Karl Pearson’s Co-efficient of correlation in order to find the significance of relationship between the variables.

$$r = \frac{\frac{\sum xy}{n} - \bar{x}\bar{y}}{SD_x \cdot SD_y}$$

$$\bar{x} = \text{Mean of pretest}$$

$$\bar{y} = \text{Mean of posttest}$$

$$\frac{\sum xy}{n} = \text{Average of pretest and post test score}$$

$$SD_x = \text{Standard deviation of pre test score}$$

$$SD_y = \text{Standard deviation of post test score}$$